

IN THE CLAIMS:

Claims 1-20 Canceled.

1 21. (Currently Amended) A system for discovering and maintaining geographic location
2 information for network sites, the system comprising:
3 a portable computing unit having a location discovery entity, a message generator
4 configured to generate network messages, and a communication facility for transmitting
5 the network messages onto a computer network; and
6 a location generator configured and arranged to determine physical coordinates
7 for its current location, the location generator coupled to the computing unit for providing
8 physical coordinates thereto;
9 whereby,
10 the discovery entity and the message generator cooperate to acquire physical co-
11 ordinates from the location generator for a given network site, and to load the acquired
12 physical coordinates into one or more network messages, and
13 the communication facility transmits the one or more network messages contain-
14 ing the physical coordinates to a designated network entity; and
15 the one or more network messages correspond to an emergency call from the
16 source entity.

1 22. (Previously Presented) The system of claim 21 wherein
2 the location generator includes a Global Positioning System (GPS) receiver for
3 determining physical coordinates.

1 23. (Previously Presented) The system of claim 22 wherein
2 the location generator further includes an inertial navigation unit configured to
3 produce signals responsive to the unit being moved, the inertial navigation unit coupled
4 to the portable computing unit for providing the inertial navigation signals thereto, and
5 the discovery entity is configured to integrate the inertial navigation signals with
6 physical coordinates acquired by the GPS receiver for a substitute location to produce
7 physical coordinates for the given network site.

1 24. (Previously Presented) The system of claim 21 further comprising one or more an-
2 tenna coupled to the location discovery entity of the portable computing unit, the one or
3 more antenna configured to receive radio signals from a plurality of transmitting base sta-
4 tions, wherein
5 the radio signals are encoded with the physical coordinates of the respective base
6 station, and
7 the location discovery entity is configured to compute the physical coordinates for
8 its current location based on the received radio signals.

1 25. (Previously Presented) The system of claim 24 wherein the location discovery entity
2 employs triangulation techniques to compute the physical coordinates for its current loca-
3 tion.

1 26. (Previously Presented) The system of claim 24 wherein the radio signals are Ultra
2 Wideband (UWB) radio signals.

1 27. (Previously Presented) The system of claim 21 wherein the given network site corre-
2 sponds to a Voice over Internet Protocol (VoIP) phone.

1 28. (Currently Amended) A method for discovering and maintaining location information
2 of a plurality of network entities forming a computer network, the method comprising the
3 steps of:

4 utilizing a Global Positioning System (GPS) unit to derive physical coordinates of
5 a location associated with a first network entity of the computer network;

6 generating one or more network messages containing the physical coordinates de-
7 rived for the first network entity; and

8 sending the one or more network messages containing the physical coordinates to
9 a second network entity of the computer network, whereby the second network entity as-
10 sociates the physical coordinates with the first network entity, and the one or more net-
11 work messages correspond to an emergency call from the source entity .

1 29. (Currently Amended) A storage medium containing program instructions executable
2 by a processing element for associating physical location information with one or more
3 network messages originating from a source entity, the one or more network messages
4 being directed to a destination entity, the program instructions comprising program in-
5 structions for:

6 receiving physical coordinates of the location of the source entity;
7 storing the physical coordinates received for the source entity;
8 receiving the one or more network messages originating from the source entity;
9 forwarding the one or more network messages toward the destination entity; and
10 sending the physical coordinates received for the source entity to the destination
11 entity, and the one or more network messages correspond to an emergency call from the
12 source entity.

1 30. (Previously Presented) The storage medium of claim 29 wherein the program instruc-
2 tions for sending comprise program instructions for appending the physical coordinates to
3 at least one of the one or more network messages originating from the source entity.

1 31. (Previously Presented) The storage medium of claim 29 wherein the program instruc-
2 tions for sending comprise program instructions for:
3 generating one or more network messages that are separate from the network
4 messages originating from the source entity;

5 loading the physical coordinates into the one or more separate network messages;
6 and
7 sending the one or more separate network messages to the destination entity.

1 32. (Currently Amended) The storage medium of claim 29 wherein
2 the source entity is a Voice over Internet Protocol (VoIP) phone
3 ~~and the one or more network messages correspond to an emergency call from the VoIP~~
4 ~~phone.~~

1 33. (Previously Presented) The storage medium of claim 32 wherein the destination entity
2 corresponds to a Public Safety Answering Point (PSAP).

1 34. (Previously Presented) The storage medium of claim 29 wherein
2 the program instructions are executed by a network switch having a memory, and
3 the physical coordinates are stored in the memory of the network switch.

1 35. (Currently Amended) A system for discovering and maintaining geographic location
2 information for network sites, the system comprising:
3 means for generating physical coordinates corresponding to the location of a first
4 network entity;

5 means for loading the physical coordinates generated for the first network entity
6 into one or more network messages; and
7 means for sending the one or more network messages to a selected intermediate
8 network device for storage thereby, and the one or more network messages correspond to
9 an emergency call from the source entity.

1 36. (Previously Presented) The system of claim 35 wherein the generating means utilizes
2 at least one of a plurality of Global Positioning System (GPS) signals and an inertial
3 navigation unit to generate the physical coordinates.

1 37. (Previously Presented) The system of claim 35 wherein the network sites correspond
2 to the network entities of a computer network disposed within an office.

1 38. (Previously Presented) The system of claim 37 wherein the network entities include
2 one or more of Voice over Internet Protocol (VoIP) phones, personal computers, servers
3 and intermediate network devices.

1 39. (Previously Presented) The system of claim 35 wherein
2 the selected intermediate network device has a plurality of ports,
3 the physical coordinates generated for the first network entity are received on a
4 given port,

5 the intermediate network device associates the received physical coordinates with
6 the given port.

1 40. (Previously Presented) The system of claim 39 wherein the received physical coordi-
2 nates are bound to the given port.

Please add new claims 41, *et seq.*, as follows:

- 1 41. (New) The system as in claim 21, further comprising:
2 the emergency call is to a Public Safety Answering Point (PSAP).
- 1 42. (New) The method of claim 28, further comprising:
2 sending the emergency call to a Public Safety Answering Point (PSAP).
- 1 43. (New) The storage medium of claim 29, comprising:
2 storing instructions for sending the emergency call to a Public Safety Answering
3 Point (PSAP).
- 1 44. (New) The system of claim 35, further comprising:
2 means for sending the emergency call to a Public Safety Answering Point
3 (PSAP).
- 1 45. (New) A method for discovering and maintaining geographic location information for
2 network sites, comprising:
3 generating physical coordinates corresponding to the location of a first network
4 entity;
5 loading the physical coordinates generated for the first network entity into one or
6 more network messages;

7 sending the one or more network messages to a selected intermediate network de-
8 vice, the selected intermediate network device having a plurality of ports;
9 receiving the physical coordinates generated for the first network entity on a given
10 port; and
11 associating the received physical coordinates with the given port.

1 46. (New) The method of claim 45, further comprising:

2 binding the received physical coordinates to the given port.

1 47. (New) The method of claim 45, further comprising:

2 generating the one or more network messages to correspond to an emergency call.

1 48. (New) The method of claim 47, further comprising:

2 directing the emergency call to a Public Safety Answering Point (PSAP).

1 49. (New) The method of claim 45, further comprising:

2 using a Voice over Internet Protocol (VoIP) phone as the first network entity.

1 50. (New) A system to discover and maintain geographic location information for net-
2 work sites, comprising:

3 means for generating physical coordinates corresponding to the location of a first
4 network entity;

5 means for loading the physical coordinates generated for the first network entity

6 into one or more network messages;

7 means for sending the one or more network messages to a selected intermediate

8 network device, the selected intermediate network device having a plurality of ports;

9 means for receiving the physical coordinates generated for the first network entity

10 on a given port; and

11 means for associating the received physical coordinates with the given port.

1 51. (New) The system of claim 50, further comprising:

2 means for binding the received physical coordinates to the given port.

1 52. (New) The system of claim 50, further comprising:

2 means for generating the one or more network messages to correspond to an

3 emergency call.

1 53. (New) The system of claim 52, further comprising:

2 means for directing the emergency call to a Public Safety Answering Point

3 (PSAP).

1 54. (New) The system of claim 50, further comprising:

2 means for using a Voice over Internet Protocol (VoIP) phone as the first network

3 entity.

1 55. (New) An intermediate network device to discover geographic location information
2 for network sites, comprising:

3 means for receiving a one or more network messages at the intermediate network
4 device, the one or more network messages carrying physical coordinates corresponding to
5 the location of a first network entity, the selected intermediate network device having a
6 plurality of ports, and receiving the physical coordinates generated for the first network
7 entity on a given port; and

8 means for associating the received physical coordinates with the given port.

1 56. (New) A computer readable media, comprising:

2 said computer readable media containing instructions for execution on a processor
3 for the practice of a method for operation on an intermediate network device to discover
4 geographic location information for network sites, having,

5 receiving a one or more network messages at the intermediate network device, the
6 one or more network messages carrying physical coordinates corresponding to the loca-
7 tion of a first network entity, the selected intermediate network device having a plurality
8 of ports, and receiving the physical coordinates generated for the first network entity on a
9 given port; and

10 associating the received physical coordinates with the given port.